WHAT IS CLAIMED IS:

1. A pellicle for lithography which has at least, a pellicle film for dustproof protection, a pellicle frame to which the pellicle film is adhered, an adhesive layer provided on one end face of the pellicle frame in order to adhere the pellicle film, and a sticking layer formed on another end face of the pellicle frame, wherein the pellicle film is formed by a die coating machine.

2. The pellicle for lithography according to Claim 1 wherein an area of the pellicle film is 1000 cm^2 or more, and a distribution of a thickness of the film in plane is within $\pm$ 10 %.

3. The pellicle for lithography according to Claim 1 which is used in a lithography process for manufacture of a liquid-crystal-display panel.

4. The pellicle for lithography according to Claim 2 which is used in a lithography process for manufacture of a liquid-crystal-display panel.

5. A method for producing a pellicle film comprising at least a process of dissolving a raw material of a pellicle film in a solvent to prepare an application liquid, a process of coating a substrate with the application liquid, and a process of drying the substrate

to which the application liquid is applied, wherein the coating process is carried out with a die coating machine.

6. The method for producing a pellicle film according to Claim 5 wherein the coating process performed with the die coating machine is carried out in an amount of an application liquid in the range obtained from the following formula (1).

$0.9 \times V1 < V < 1.1 \times V1$ (1)

$(V1 = S \times t/(D/100))$

$V(m^3)$: an amount of an application liquid

S (m^2): an area of a substrate

$t(m)$: a film thickness after drying

D (%): a concentration of application liquid

7. The method for producing a pellicle film according to Claim 5 wherein the drying process comprises air-dry for 5 minutes or more in the air of which a flow rate on the surface of the substrate is 30 cm or less per second followed by drying at a temperature more than the boiling point of the application liquid.

8. The method for producing a pellicle film according to Claim 6 wherein the drying process comprises air-dry for 5 minutes or more in the air of which a flow rate on the surface of the substrate is 30 cm or less per second followed by drying at a temperature more than the boiling

point of the application liquid.

9. The method for producing a pellicle film according to Claim 5 wherein a pellicle film having an area of 1000 cm^2 or more is produced.

10. The method for producing a pellicle film according to Claim 6 wherein a pellicle film having an area of 1000 cm^2 or more is produced.

11. The method for producing a pellicle film according to Claim 7 wherein a pellicle film having an area of 1000 cm^2 or more is produced.

12. The method for producing a pellicle film according to Claim 8 wherein a pellicle film having an area of 1000 cm^2 or more is produced.

13. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 5 with the adhesive layer to one end face of the pellicle frame.

14. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film

produced by the method according to Claim 6 with the adhesive layer to one end face of the pellicle frame.

15. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 7 with the adhesive layer to one end face of the pellicle frame.

16. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 8 with the adhesive layer to one end face of the pellicle frame.

17. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 9 with the adhesive layer to one end face of the pellicle frame.

18. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 10 with the adhesive layer to one end face of the pellicle frame.

19. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 11 with the adhesive layer to one end face of the pellicle frame.

20. A method for producing a pellicle for lithography comprising at least providing an adhesive layer on one end face of a pellicle frame, and adhering the pellicle film produced by the method according to Claim 12 with the adhesive layer to one end face of the pellicle frame.

21. The pellicle for lithography produced by the method according to Claim 5.